

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	6512	alpha adj amylase\$1	US-PGPUB; USPAT	OR	OFF	2004/05/03 15:23
L2	6194	hyperthermophil\$ or thermophil\$	US-PGPUB; USPAT	OR	OFF	2004/05/03 15:23
L3	781	1 and 2	US-PGPUB; USPAT	OR	OFF	2004/05/03 15:23
L4	1938	1 near8 (gene\$1 or sequence\$1)	US-PGPUB; USPAT	OR	OFF	2004/05/03 15:24
L5	28	4 same 2	US-PGPUB; USPAT	OR	OFF	2004/05/03 15:24

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DOCUMENT-IDENTIFIER: US 20040018607 A1

TITLE: Amylases, nucleic acids encoding them and methods for making and using them

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

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APPL-NO: 10/ 385305

DATE FILED: March 6, 2003

RELATED-US-APPL-DATA:

child 10385305 A1 20030306

parent continuation-in-part-of 10081872 20020221 US PENDING

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FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
WO	PCT/US02/05068	2002WO-PCT/US02/05068	February 21, 2002

US-CL-CURRENT: 435/201, 435/105 , 435/320.1 , 435/325 , 435/69.1 , 536/23.2

ABSTRACT:

In one aspect, the invention is directed to polypeptides having an amylase activity, polynucleotides encoding the polypeptides, and methods for making and using these polynucleotides and polypeptides. In one aspect, the polypeptides of the invention can be used as amylases, for example, alpha amylases, to catalyze the hydrolysis of starch into sugars.

#### RELATED APPLICATIONS

[0001] This application is a continuation-in-part (CIP) of U.S. patent application Ser. No. ("U.S. Ser. No.") 10/081,872, filed Feb. 21, 2002, now pending, which claims the benefit of priority under 35 U.S.C. .sctn.119(e) of U.S. Provisional Applications Nos. 60/270,495, filed Feb. 21, 2001; 60/270,496, filed Feb. 21, 2001; and 60/291,122, filed May 14, 2001, and international patent application serial no. PCT/US02/05068, filed Feb. 21, 2002. This application also claims the benefit of priority under 35 U.S.C. .sctn.119(e) of U.S. Provisional Application No. 60/423,626, filed Oct. 31, 2002. This application is also a continuation-in-part (CIP) of U.S. Ser. No. 10/081,739, Feb. 21, 2002, now pending, and U.S. Ser. No. 10/105,733, filed Mar. 22, 2002, now pending. Each of the aforementioned applications is explicitly incorporated herein by reference in their entirety and for all purposes.

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Detail Description Paragraph - DETX (601):

[0690] An initial bioinformatic analysis was made with the known hyper-thermophilic alpha-amylase sequences. FIG. 14a shows an alignment of the sequences some of which have been deposited at the NCBI database. This analysis revealed the potential for designing degenerate primers to PCR the entire gene minus its signal sequence (see FIG. 14a), yielding potentially novel full-length alpha amylases from a library.

US-PAT-NO: 6706525

DOCUMENT-IDENTIFIER: US 6706525 B1

TITLE: Highly transformable bacterial cells and methods for  
producing the same

DATE-ISSUED: March 16, 2004

INVENTOR-INFORMATION:

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APPL-NO: 08/ 846996

DATE FILED: May 1, 1997

US-CL-CURRENT: 435/471, 435/252.1 , 435/252.33

ABSTRACT:

The invention provided herein includes novel gram negative bacteria cells containing the Hte mutation. Other aspects of the invention include methods for rendering gram negative bacterial cells bearing the Hte region, such as E. coli cells competent for DNA transformation using any of a variety of competency inducing procedures. The competent cells of the subject invention may be frozen so as to provide for prolonged storage.

13 Claims, 0 Drawing figures

Exemplary Claim Number: 1

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Brief Summary Text - BSTX (61):

Additionally, the Hte region may be used in conjunction with cloning vectors that may be screened using LacZa fragment complementation in conjunction with a particular mutation within the LacZ gene. Similarly, the cell may contain various other deletions or mutations in order to provide for complementation by the transforming DNA. The host cell may either possess or lack a restriction-modification system in order to expedite cloning. The host cells may also lack one or more recombination systems, e.g., RecA, RecBC. Particularly preferred strains of E. coli for use in the invention are the XL1-Blue.TM. strain (Stratagene, La Jolla, Calif.), the XL1-Blue MR strain, and the SURE.TM. strain (Stratagene, La Jolla, Calif.) that have been modified by the addition of a genetic construction for the expression of alpha-amylase isolated from a thermophilic bacteria and have the ATCC accession numbers 69480, 69481 and 69482, respectively. The plasmid containing the alpha-amylase gene in the E. coli strains having ATCC accession numbers 69480, 69481 and 69482 may be readily transferred to other strains of bacteria using techniques well known to the person of average skill in the art. Similarly, the person of average skill in the art may excise the alpha amylase gene from plasmids in the E. coli strains having accession numbers 69480, 69481 and 69482 and transfer the alpha amylase gene to a new genetic construct prior to transferring the gene to a new strain of bacteria.

